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Recreation Services and
Management Practices at Quabbin Reservation:
A Survey of Visitors

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Recreation Services and Management Practices at Quabbin Reservation: A Survey of Visitors

Introduction

The Management of a major public drinking water reservoir presents numerous challenges for administrators. The primary mission, of course, is to deliver safe, high-quality drinking water to the public. In the case of Quabbin Reservoir, the site of this study, this is especially important since water is provided without being processed through a treatment plant of any kind. It is clear, however, that with the implementation of sound management practices, drinking water reservoirs can be managed in ways that not only assure the delivery of safe water, but can provide other services as well. For example, administrators within the MDC have developed on-site programs at Quabbin Reservation in timber harvesting, wildlife management, recreation, conservation, environmental education and environmental interpretation.

These programs have been highly successful in terms of the numbers who have visited Quabbin year after year. Yet, very little is known about how visitors feel about the way this important resource is managed as a multiple-use facility. Thus, the Superintendent of Quabbin Reservation obtained MDC funding for this twelve-month study to learn about the views of visitors to the reservation, views related to how Quabbin is managed, in general, and the extent to which visitors are satisfied with recreation opportunities that are currently provided there.

On-site interviews were conducted from June, 1987 into May, 1988. A total of 1843 were obtained. While interviews were conducted at sites throughout the reservation, by design, most took place within the Quabbin Park area; thus, generalizations about all visitors are inappropriate. However, only three groups appear to be significantly under-represented. These include those who fish by boat, those who shore fish and those who hike in areas that are more isolated. Participants in other activities appear to be quite well represented.

Most of the survey information was obtained through face-to-face interviews. However, approximately 525 self-administered questionnaires were completed at the Visitors' Center. The analysis of responses from both sets of surveys indicates that there were significant differences between the groups, particularly in regard to respondent knowledge about policies. However, differences may have little to do with whether or not the survey was self-administered; it is more likely that differences relate more to the different types of visitors who are attracted to different sites. There may have been no differences had self-administered surveys been available at all sites. Thus, future surveys of the public could be conducted without the need for costly interviews if self-administered surveys can be made available to visitors at a variety of sites. Prior to implementing this approach, it would be advisable to conduct a short pilot study to confirm that differences between the two methods do not, in fact, exist.

Most of the face-to-face interviews were conducted in the summer of 1987 although all seasons of the year are represented. This differs from a similar study which was conducted in 1978 in which virtually all interviews were conducted during the summer. It should also be noted that a greater proportion of interviews were obtained at the fishing gates in the 1978 study. Accordingly, there are differences in the study populations, particularly in regard to the places of residence of visitors. Those who fish by boat at Quabbin tend to travel greater distances than those who visit Quabbin Park. This should be kept in mind as the results of this study are evaluated.

The results of this study make it apparent that most visitors view the management practices of Quabbin Reservation very favorably. Respondents also reported relatively high satisfaction levels with the recreation opportunities that are available to them. In some cases the need for change or improvement was expressed; these responses should be helpful to the MDC administration.

It is clear that many visitors, particularly those interviewed at certain sites, are quite unfamiliar with the policies that are in effect at this facility. Informational and educational programs should be increased to address this problem. That issue aside, the results of this survey indicate that visitors realize that the MDC's primary purpose is to provide safe drinking water and, at the same time, they appreciate having the opportunity to enjoy this resource in a variety of ways.

Findings and Discussion

Table 1. Visitors Residence

It is important to keep in mind that a disproportionate number of interviews intentionally took place in Quabbin Park. Only enough interviews were conducted at the fishing gates and Pottapaug Pond to obtain a reasonable representation of the views of people who fish; thus, those who fished and recreated at those sites. Thus, the place of residence data presented in table 1 more accurately represent Quabbin Park visitors rather than visitors to the watershed as a whole.

Table 2. Quabbin Visitors by Region of Residence

As is apparent in Table 2, nearly 90% of all visitors reside in Massachusetts. Slightly more than 5 percent lived in other New England states.

Table 3. Age Group of Respondents

The group with the highest level of visitation was the 30-45 year olds followed by the 21-29 year olds. Together they accounted for 60% of all visitors. Those over 60 years of age accounted for more than one-fifth of the total. The remaining 18% were the 16-20 and 46-59 year old age groups. It should be noted that the ranges represented by these groupings are not uniform in size.

Table 4. Number of Youths below 18 Years of Age in Group

More than three of four respondents were not accompanied by children. Many children do visit Quabbin, of course, especially with scout groups, school classes and photography clubs. According to the results of this study, however, most visitors to the reservoir are adults who do not bring their children with them. This pattern could be changed if more educational exhibits and programs were to be developed that are specifically targeted toward youngsters.

Table 1
Visitors Residence

Town	Number	Rel. Percent	Percent
Agawam	17	0.9	1.6
Amherst	78	4.2	7.3
Athol	22	1.2	2.1
Auburn	12	0.7	1.1
Barre	18	1	1.7
Belchertown	112	6.1	10.5
Boston	34	1.8	3.2
Brookfield	11	0.6	1.0
Chicopee	84	4.6	7.9
East Longmeadow	14	0.8	1.3
Easthampton	17	0.9	1.6
Granby	11	0.6	1.0
Greenfield	13	0.7	1.2
Hadley	19	1	1.8
Hardwich	12	0.7	1.1
Holyoke	31	1.7	2.9
Longmeadow	12	0.7	1.1
Ludlow	35	1.9	3.3
Monson	10	0.5	0.9
North Brookfield	10	0.5	0.9
Northampton	33	1.6	3.1
Orange	11	0.6	1.0
Palmer	47	2.6	4.4
Pelham	16	0.9	1.5
Shutesbury	10	0.5	0.9
South Hadley	23	1.2	2.2
Spencer	21	1.1	2.0
Springfield	91	4.9	8.5
Sturbridge	11	0.6	1.0
Sunderland	12	0.7	1.1
Ware	84	4.6	7.9
Warren	12	0.7	1.1
West Springfield	13	0.7	1.2
Westfield	25	1.4	2.3
Wilbraham	23	1.2	2.2
Worcester	65	3.5	6.1
Total	1069	57.9	100.0

Missing:

N=348

Note: Relative Percentages Out of Survey Total

Table 2
Quabbin Visitors by
Region of Residence

Region	Total Sample	
	N	Percent
Mass	1499	88.80
New England	86	5.10
Other U.S.	58	3.40
PA/NJ/DE	20	1.20
NY	14	0.80
Foreign	11	0.60
Total	1688	100.00

Table 3
Age Group of Respondents

Age Group	Number	Percent
16-20	93	5.5
21-29	403	23.6
30-45	630	36.9
46-59	233	13.7
60+	347	20.3
Total	1706	100.0

Missing:
N=137

Table 4
Number of Youths Below
18 Years of Age in Group

	Number	Percent
0 Children	1425	77.4
1-5 Children	395	21.4
6-12 Children	17	0.9
20+ Children	5	0.3
Total	1842	100.0

Table 5. Number of Adults in Group (over 18)

Some respondents who indicated that there were '0 Adults' in their group may have been 18 years of age, or older, but did not include themselves in this item. It is clear, however, that the large majority of visitors were accompanied by two or less other adults.

**Table 5
Number of Adults in Group**

Age Group	Number	Percent
0 Adults	429	23.3
1 Adult	506	27.5
2 Adults	698	37.9
3-4 Adults	177	9.7
5-12 Adults	26	1.5
20+ Adults	7	.4
Total	1843	100.0

Table 6. Number of Senior Citizens in Group

Three-fourths of all visitors were in groups without seniors. The fact that one-fourth of all individuals who visited Quabbin were senior citizens is noteworthy. As life expectancy continues to increase, this percentage will undoubtedly increase. The need to provide access for those with disabilities is already apparent; it will become even more necessary in the years to come.

**Table 6
Number of Senior
Citizens in Group**

Age Group	Number	Percent
0 Seniors	1388	75.4
1-5 Seniors	440	23.9
6-8 Seniors	4	0.2
14-18 Seniors	7	0.4
21-25 Seniors	3	0.2
Total	1842	100.0

Table 7. How Visitors Learned About Quabbin Reservoir

Nearly half the visitors learned about the reservoir simply from living in the area and more than one-third from family and friends. This should be taken into account in any effort to promote this facility.

Table 7
How Visitors Learned
about Quabbin Reservoir

Learned by:	N	Percent
Lives in the Area	845	46.28
Family	312	17.09
Friend	310	16.98
Other	196	10.73
Organization	57	3.12
Driving by Entrance	54	2.96
Newspaper	52	2.85
Total	1826	100.00

Table 8. Type of Trip Respondents are Taking at the Time They Visited Quabbin

Day trips account for all but 8% of visitations. Quabbin is attracting very few out-of-state tourists or people who are taking overnight trips to other destinations. State planners and MDC administrators may wish to discuss the extent to which Quabbin should be promoted as a part of the statewide tourism program. The costs and benefits should be weighed very carefully, particularly in terms of Quabbin's carrying capacity, specifically traffic flow and parking facilities. Attracting tourists may be quite cost-effective since out-of-state visitors would be spending money while in Massachusetts, yet have very little impact on Quabbin itself.

Table 8
Type of Trip Respondents Are Taking
at the Time They Visited Quabbin

Type	Number	Percent
Day Trip	1557	92.1
Longer Than 1 Day	133	7.9
Total	1690	100.0

Missing:
N=153

Table 9. Main Activity Pursued During This Visit to Quabbin

Sightseeing was the activity with the highest participation level as the main activity pursued during the visit. Picnicking, eagle observing and boat fishing followed with 11 percent 9, percent and 8 percent, respectively. It must be noted that visitors were over-sampled in January and February to specifically obtain the views of those who wished to observe the eagles. In actuality, the percentage in this group is lower than these data suggest as those fishing from boats are under-represented.

**Table 9
Main Activity Pursued
During This Visit to Quabbin**

Activity	Total Sample	
	N	Percent
Sightseeing	665	38.02
Picnicking	196	11.21
Eagles	157	8.98
Boat Fishing	146	8.35
Nature Study	96	5.49
Hiking	91	5.20
Walking	91	5.20
Shore Fishing	79	4.52
Photography	63	3.60
Other	43	2.46
Sunbathing	41	2.34
Bicycling	38	2.17
Berries	15	0.86
Motorcycling	14	0.80
Field Games	8	0.46
Jogging	4	0.23
Row-boating	1	0.06
Canoeing	1	0.06
Total	1749	100.00

Table 10. Activity Participations During This Visit to Quabbin

Even when participation in all activities is combined, sightseeing ranks highest in terms of total participations. As would be expected in this natural area, relatively passive activities were pursued with the greatest frequency. Again those who fish by boat are under-represented.

Table 10
Activity Participations
During This Visit to Quabbin

Activity	Total N	Sample Percent
Sightseeing	1138	30.01
Walking	501	13.21
Picnicking	399	10.52
Nature Study	327	8.62
Photography	307	8.10
Hiking	299	7.89
Eagles	212	5.59
Boat Fishing	154	4.06
Shore Fishing	103	2.72
Sunbathing	98	2.58
Other	88	2.32
Field Games	45	1.19
Bicycling	44	1.16
Motorcycling	30	0.79
Berries	22	0.58
Jogging	11	0.29
Canoeing	8	0.21
Row-boating	6	0.16
Total	3792	100

Table 9 and 10. Comparison of Activity participation levels found in Tables 9 and 10.

Tables 9 and 10 have been combined to facilitate a quick comparison of how activities ranked in terms of main activities which were pursued and a composite of all activities that were undertaken. In both cases, sightseeing ranked first, clearly in a class by itself.

Table 9 and 10. Comparison of activity level ranks found in tables 9 and 10

Activity	Rank of Total Participations (Table 9)	Rank of Main Activities (Table 10)
Boat Fishing	8	4
Bicycling	11	10
Shore Fishing	9	8
Eagles	7	3
Berries	14	13
Sightseeing	1	1
Picnicking	3	2
Other	11	11
Motorcycling	13	14
Sunbathing	10	12
Jogging	15	16
Hiking	6	6
Nature Study	4	5
Photography	5	9
Walking	2	16
Field Games	12	15
Row-boating	17	17
Canoeing	16	17

Table 11. Activities Pursued When Not at Quabbin

Six of the top ten activities are allowed at Quabbin, four are not. Individuals who visited Quabbin were especially likely to engage in activities such as hiking, biking, swimming and camping in their recreation pursuits at other areas and facilities. Visitors were asked to list all activities in which they participated. Percents are based on the number of respondents, thus they exceed 100 percent due to multiple responses.

Table 11
Activities Pursued When Not at Quabbin

Activity	Total Sample	
	N	Percent of Total Visitors
Hiking	553	30.00
Walking	430	23.30
*Swimming	335	18.20
Bicycling	231	12.50
*Camping	218	11.80
*Skiing (x-c)	152	8.20
*Hunting	147	8.00
Photography	135	7.30
Sightseeing	131	7.10
Birdwatching	127	6.90
Picnicking	114	6.20
*Skiing (downhill)	112	6.10
Fishing	111	6.00
Jogging	108	5.90
Boating	101	5.50
*Gardening	94	5.10
*Tennis	79	4.30
Canoeing	71	3.90
Golf	72	3.90
Softball	59	3.20
Outdoor Games	39	2.10
*Motorcycling	37	2.00
*Sailing	37	2.00
Baseball	34	1.80
*Basketball	33	1.80
Frisbee	29	1.60
Travel	29	1.60
*Waterskiing	25	1.40
Football	21	1.10
Soccer	18	1.00
*Horseback Riding	15	0.80
Driving	9	0.50
*Hockey	7	0.40
*Shooting	7	0.40
*Rafting	6	0.30
*Shopping	5	0.30
Painting	4	0.20
(Total Visitors)	(1843)	

* not permitted at Quabbin, or no facilities

Table 12. The respondents perceptions of those activities that are allowed or not allowed at Quabbin

Many visitors are quite familiar with the rules and regulations that are in place at Quabbin. The following summary of Table 12 highlights in **bold** the responses stated by the majority or a plurality.

Table 12
Visitors Perceptions of Activities That
Are Allowed or Not Allowed at Quabbin

Activities Not Allowed	Yes		No		Unsure		Total N
	N	Percent	N	Percent	N	Percent	
Alcoholic Beverages	25	1.6	1465	93.3	81	5.2	1571
Swimming	33	2.1	1448	92.6	82	5.2	1563
Campfires	35	2.2	1415	90.1	121	7.7	1571
Camping	60	3.8	1372	87.3	140	8.9	1572
Power-boating	113	7.2	1300	83.2	150	9.6	1563
Motorcycling/Off-roads	113	7.2	1265	80.9	185	11.8	1563
Landing boats	90	5.8	1216	77.9	255	16.3	1561
Sailing on Res.	132	8.4	1213	77.5	220	14.1	1565
Canoeing on Res.	270	17.3	1054	67.3	241	15.4	1565
Ice-fishing	216	13.8	1036	66.4	308	19.7	1560
BBQ Grills	267	17.0	1032	65.8	269	17.2	1568
Pets	536	34.2	802	51.2	228	14.6	1566
Cross-country Skiing	380	24.3	741	47.4	443	28.3	1564
Allowed							
Motorboat Fishing	858	54.9	556	35.5	150	9.6	1564
Night fishing	235	15.0	1070	68.4	259	16.6	1564
No Policy							
Bicycling/Off-roads	880	56.3	349	22.3	334	21.4	1563

Summary Percentages of Correct Responses:

<u>80% +</u>	<u>60% to 79%</u>	<u>40% to 59%</u>	<u>Less than 40%</u>
Alcoholic Beverages	Landing boats	Pets	Night fishing
Swimming	Sailing on Res.	Cross-country Skiing	
Campfires	Canoeing on Res.	Motorboat Fishing	
Camping	Ice-fishing		
Power-boating	BBQ Grills		
Motorcycling/Off-roads			

Tables 13-28. Knowledge of Policies at Quabbin Reservoir

Tables 13-28 also report visitors' knowledge of policies but do so according to the site where the interview took place. The intent was to determine if knowledge levels varied among visitors at different sites. If so, strategies could be developed to increase the knowledge of visitors at certain sites with the use of signs, brochures, etc. The number of individuals interviewed was quite small at some sites. There were virtually no differences among respondents interviewed at the different sites in terms of their knowledge of policies governing alcohol, campfires, and swimming. There were differences, however, on the remaining policies. The relative importance of these differences must be considered, of course. In certain cases, which have been noted, it is clear that some visitors are highly misinformed.

(Tables 13-28 follow)

For each table, problem sites were noted only if:

- (1) The percent of incorrect responses was 20 percent, or greater and
- (2) at least 20 visitors responded to the issue.

Table 13
Knowledge of Policy
on Alcoholic Beverages

Site	Incorrect Percent		Correct Percent		Unsure	Percent
Tower	9	1.9	433	91.5	31	6.6
Visitors Center	4	1.5	255	93.1	15	5.5
Dam Picnic Area	0	0.0	59	98.3	1	1.7
Dam Parking Turnout	1	1.8	47	85.5	7	12.7
Enfield Lookout	6	1.8	314	94.6	12	3.6
Hanks Picnic	0	0.0	114	96.6	4	3.4
Goodnough Picnic Area	2	9.5	18	85.7	1	4.8
Goodnough Lookout Point	0	0.0	14	93.3	1	6.7
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	3	2.7	103	93.6	4	3.6
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	0	0.0	23	95.8	1	4.2
Gate 40	0	0.0	19	90.5	2	9.5
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	15	100.0	0	0.0
Swift River	0	0.0	27	96.4	1	3.6
Total (1570)	25	1.6	1464	93.2	81	5.2

Missing:
N=273

Table 13: No problem sites

Table 14
Knowledge of BBQ Policy

Site	Incorrect		Correct		Unsure	Percent
Tower	95	20.1	275	58.1	103	21.8
Visitors Center	36	13.3	184	68.1	50	18.5
Dam Picnic Area	3	5.0	45	75.0	12	20.0
Dam Parking Turnout	6	10.9	37	67.3	12	21.8
Enfield Lookout	72	21.6	199	59.8	62	18.6
Hanks Picnic	19	16.1	93	78.8	6	5.1
Goodnough Picnic Area	7	33.3	13	61.9	1	4.8
Goodnough Lookout Point	3	20.0	10	66.7	2	13.3
Goodnough Tailhead	1	100.0	0	0.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	2	100.0	0	0.0	0	0.0
Gate 8 Boat Launch	11	10.0	90	81.8	9	8.2
Gate 31 Roadway	1	20.0	3	60.0	1	20.0
Gate 31 Mooring	2	8.3	21	87.5	1	4.2
Gate 40	1	4.8	17	81.0	3	14.3
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	5	83.3	1	16.7
Gate 44	0	0.0	3	100.0	0	0.0
Other	1	6.7	14	93.3	0	0.0
Swift River	7	25.0	15	53.6	6	21.4
Total (1567)	267	17.0	1031	65.8	269	17.2

Missing
N=276

Problem sites: Tower, Enfield Lookout, Goodnough Picnic Area, Swift River.

Table 15
Knowledge of Policy on
Bicycling on off Roads

Site	Yes	Percent	No	Percent	Unsure	Percent
Tower	258	54.7	108	22.9	106	22.5
Visitors Center	123	46.1	65	24.3	79	29.6
Dam Picnic Area	41	68.3	10	16.7	9	15.0
Dam Parking Turnout	28	50.9	8	14.5	19	34.5
Enfield Lookout	190	57.2	67	20.2	75	22.6
Hanks Picnic	87	73.7	21	17.8	10	8.5
Goodnough Picnic Area	16	76.2	3	14.3	2	9.5
Goodnough Lookout Point	8	53.3	5	33.3	2	13.3
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	6	100.0	0	0.0	0	0.0
Dana Center	2	100.0	0	0.0	0	0.0
Gate 8 Boat Launch	53	48.2	38	34.5	19	17.3
Gate 31 Roadway	2	40.0	1	20.0	2	40.0
Gate 31 Mooring	16	66.7	5	20.8	3	12.5
Gate 40	15	71.4	4	19.0	2	9.5
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	3	50.0	2	33.3	1	16.7
Gate 44	2	66.7	1	33.3	0	0.0
Other	13	86.7	2	13.3	0	0.0
Swift River	15	53.6	8	28.6	5	17.9
Total (1562)	879	56.3	349	22.3	334	21.4

Missing:
N=281

Note: policy is not specific; there is no considerable variation by site.

Table 16
Knowledge of Policy on Campfires

Site	Incorrect	Percent	Correct	Percent	Unsure	Percent
Tower	10	2.1	417	88.2	46	9.7
Visitors Center	6	2.2	234	86.0	32	11.8
Dam Picnic Area	0	0.0	57	95.0	3	5.0
Dam Parking Turnout	0	0.0	47	85.5	8	14.5
Enfield Lookout	10	3.0	309	92.5	15	4.5
Hanks Picnic	2	1.7	113	95.8	3	2.5
Goodnough Picnic Area	0	0.0	21	100.0	0	0.0
Goodnough Lookout Point	1	6.7	13	86.7	1	6.7
Goodnough Tailhead	0	0.0	0	0.0	1	100.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	4	3.6	98	89.1	8	7.3
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	0	0.0	23	95.8	1	4.2
Gate 40	0	0.0	20	95.2	1	4.8
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	15	100.0	0	0.0
Swift River	2	7.1	25	89.3	1	3.6
Total (1570)	35	2.2	1414	90.1	121	7.7

Missing:
N=273

No problem sites

Table 17
Knowledge of Policy on Camping

Site	Incorrect		Correct		Unsure	Percent
		Percent		Percent		
Tower	26	5.5	392	82.9	55	11.6
Visitors Center	10	3.7	230	84.2	33	12.1
Dam Picnic Area	1	1.7	59	98.3	0	0.0
Dam Parking Turnout	1	1.8	46	83.6	8	14.5
Enfield Lookout	7	2.1	300	89.8	27	8.1
Hanks Picnic	2	1.7	111	94.1	5	4.2
Goodnough Picnic Area	2	9.5	18	85.7	1	4.8
Goodnough Lookout Point	0	0.0	14	93.3	1	6.7
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	5	4.5	97	88.2	8	7.3
Gate 31 Roadway	0	0.0	5	100.0	0	0.0
Gate 31 Mooring	3	12.5	21	87.5	0	0.0
Gate 40	0	0.0	21	100.0	0	0.0
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	15	100.0	0	0.0
Swift River	3	10.7	23	82.1	2	7.1
Total (1571)	60	3.8	1371	87.3	140	8.9

Missing:
N=272

No problem sites

Table 18
Knowledge of Policy on
Canoeing on Main Reservoir

Site	Incorrect		Correct		Unsure	Percent
Tower	90	19.0	292	61.7	91	19.2
Visitors Center	44	16.4	170	63.2	55	20.4
Dam Picnic Area	7	11.7	42	70.0	11	18.3
Dam Parking Turnout	12	21.8	29	52.7	14	25.5
Enfield Lookout	67	20.2	236	71.1	29	8.7
Hanks Picnic	13	11.0	85	72.0	20	16.9
Goodnough Picnic Area	8	38.1	10	47.6	3	14.3
Goodnough Lookout Point	2	13.3	11	73.3	2	13.3
Goodnough Tailhead	0	0.0	0	0.0	1	100.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	1	50.0	1	50.0	0	0.0
Gate 8 Boat Launch	17	15.5	85	77.3	8	7.3
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	4	16.7	20	83.3	0	0.0
Gate 40	0	0.0	17	85.0	3	15.0
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	14	93.3	1	6.7
Swift River	4	14.3	22	78.6	2	7.1
Total (1564)	269	17.2	1054	67.4	241	15.4

Missing:
N=279

Problem Sites: Goodnough Picnic Area, Tower, Visitors' Center, Dam Turnout, Enfield Lookout, Gate 8, Gate 31

Table 19
Knowledge of Policy
on Cross-country Skiing

Site	Incorrect Percent		Correct Percent		Unsure Percent	
Tower	112	23.8	205	43.5	154	32.7
Visitors Center	58	21.6	129	48.0	82	30.5
Dam Picnic Area	14	23.3	20	33.3	26	43.3
Dam Parking Turnout	24	43.6	13	23.6	18	32.7
Enfield Lookout	99	29.8	155	46.7	78	23.5
Hanks Picnic	16	13.6	67	56.8	35	29.7
Goodnough Picnic Area	6	28.6	12	57.1	3	14.3
Goodnough Lookout Point	3	20.0	7	46.7	5	33.3
Goodnough Tailhead	1	100.0	0	0.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	1	50.0	1	50.0
Gate 8 Boat Launch	24	21.8	63	57.3	23	20.9
Gate 31 Roadway	2	40.0	2	40.0	1	20.0
Gate 31 Mooring	5	20.8	15	62.5	4	16.7
Gate 40	0	0.0	16	76.2	5	23.8
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	1	16.7	5	83.3	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	1	6.7	13	86.7	1	6.7
Swift River	12	42.9	9	32.1	7	25.0
Total (1563)	379	24.2	741	47.4	443	28.3

Missing:
N=280

Problem Sites: Many within Quabbin Park, Gate 8, Gate 31, Swift River

Table 20

Knowledge of Policy on Ice-fishing on the Main Reservoir

Site	Incorrect		Correct		Unsure	Percent
Tower	93	19.7	283	60.1	95	20.2
Visitors Center	26	9.8	170	63.9	70	26.3
Dam Picnic Area	5	8.3	42	70.0	13	21.7
Dam Parking Turnout	7	12.7	29	52.7	19	34.5
Enfield Lookout	36	10.9	239	72.2	56	16.9
Hanks Picnic	10	8.5	86	72.9	22	18.6
Goodnough Picnic Area	8	38.1	10	47.6	3	14.3
Goodnough Lookout Point	3	20.0	10	66.7	2	13.3
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	1	50.0	1	50.0
Gate 8 Boat Launch	18	16.4	80	72.7	12	10.9
Gate 31 Roadway	1	20.0	3	60.0	1	20.0
Gate 31 Mooring	5	20.8	16	66.7	3	12.5
Gate 40	0	0.0	15	71.4	6	28.6
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	1	6.7	13	86.7	1	6.7
Swift River	2	7.1	22	78.6	4	14.3
Total (1559)	216	13.9	1035	66.4	308	19.8

Missing:
N=284

Problem Sites: Tower, Goodnough Picnic Area, Gate 31 Mooring

Table 21
Knowledge of Policy on
Landing Boats on Shore

Site	Incorrect		Correct		Unsure	Percent
Tower	34	7.2	347	73.5	91	19.3
Visitors Center	10	3.7	201	75.3	56	21.0
Dam Picnic Area	3	5.0	45	75.0	12	20.0
Dam Parking Turnout	2	3.6	30	54.5	23	41.8
Enfield Lookout	22	6.7	272	82.4	36	10.9
Hanks Picnic	6	5.1	90	76.3	22	18.6
Goodnough Picnic Area	3	14.3	17	81.0	1	4.8
Goodnough Lookout Point	0	0.0	14	93.3	1	6.7
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	6	5.5	100	90.9	4	3.6
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	2	8.3	22	91.7	0	0.0
Gate 40	0	0.0	17	81.0	4	19.0
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	13	86.7	2	13.3
Swift River	1	3.6	25	89.3	2	7.1
Total (1560)	90	5.8	1215	77.9	255	16.3

Missing:
N=283

No problem sites

TABLE 22
Knowledge of Policy on Motor Boat
Fishing on the Main Reservoir

Site	Correct	Percent	Incorrect	Percent	Unsure	Percent
Tower	222	47.0	207	43.9	43	9.1
Visitors Center	128	47.8	97	36.2	43	16.0
Dam Picnic Area	38	63.3	19	31.7	3	5.0
Dam Parking Turnout	20	36.4	23	41.8	12	21.8
Enfield Lookout	193	58.1	117	35.2	22	6.6
Hanks Picnic	52	44.1	51	43.2	15	12.7
Goodnough Picnic Area	8	38.1	12	57.1	1	4.8
Goodnough Lookout Point	4	26.7	8	53.3	3	20.0
Goodnough Tailhead	0	0.0	0	0.0	1	100.0
Pottapaug Pond	1	16.7	5	83.3	0	0.0
Dana Center	1	50.0	1	50.0	0	0.0
Gate 8 Boat Launch	104	94.5	4	3.6	2	1.8
Gate 31 Roadway	5	100.0	0	0.0	0	0.0
Gate 31 Mooring	23	95.8	1	4.2	0	0.0
Gate 40	12	57.1	6	28.6	3	14.3
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	6	100.0	0	0.0	0	0.0
Gate 44	3	100.0	0	0.0	0	0.0
Other	12	80.0	2	13.3	1	6.7
Swift River	24	85.7	3	10.7	1	3.6
Total (1563)	857	54.8	556	35.6	150	9.6

Missing:
N=280

Problem Sites: Many sites within Quabbin Park, Gate 40

Table 23
Knowledge of Policy on
Motorcycling on Off-roads

Site	Incorrect		Correct		Unsure	
	Percent		Percent		Percent	
Tower	44	9.3	366	77.5	62	13.1
Visitors Center	18	6.7	197	73.2	54	20.1
Dam Picnic Area	7	11.7	46	76.7	7	11.7
Dam Parking Turnout	5	9.1	43	78.2	7	12.7
Enfield Lookout	16	4.8	289	87.6	25	7.6
Hanks Picnic	6	5.1	103	87.3	9	7.6
Goodnough Picnic Area	4	19.0	15	71.4	2	9.5
Goodnough Lookout Point	0	0.0	14	93.3	1	6.7
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	8	7.3	89	80.9	13	11.8
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	3	12.5	20	83.3	1	4.2
Gate 40	0	0.0	21	100.0	0	0.0
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	15	100.0	0	0.0
Swift River	2	7.1	23	82.1	3	10.7
Total (1562)	113	7.2	1264	80.9	185	11.8

Missing:
N=281

No problem sites

Table 24
Knowledge of Policy
on Night Fishing

Site	Correct	Percent	Incorrect	Percent	Unsure	Percent
Tower	47	9.9	336	71.0	90	19.0
Visitors Center	34	12.7	177	66.0	57	21.3
Dam Picnic Area	9	15.0	42	70.0	9	15.0
Dam Parking Turnout	5	9.1	34	61.8	16	29.1
Enfield Lookout	56	16.9	223	67.4	52	15.7
Hanks Picnic	13	11.0	89	75.4	16	13.6
Goodnough Picnic Area	2	9.5	17	81.0	2	9.5
Goodnough Lookout Point	1	6.7	11	73.3	3	20.0
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	1	16.7	5	83.3	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	24	21.8	80	72.7	6	5.5
Gate 31 Roadway	3	60.0	1	20.0	1	20.0
Gate 31 Mooring	12	50.0	11	45.8	1	4.2
Gate 40	9	42.9	7	33.3	5	23.8
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	3	50.0	3	50.0	0	0.0
Gate 44	1	33.3	2	66.7	0	0.0
Other	6	40.0	9	60.0	0	0.0
Swift River	8	28.6	19	67.9	1	3.6
Total (1563)	235	15.0	1069	68.4	259	16.6

Missing:
N=280

Problem Sites: Most Quabbin Park sites, Gate 8, Gate 31 Mooring, Gate 40, Swift River

Table 25
Knowledge of Policy on
Pets at Quabbin

Site	Incorrect Percent		Correct Percent		Unsure	Percent
Tower	189	40.0	207	43.9	76	16.1
Visitors Center	69	25.5	152	56.1	50	18.5
Dam Picnic Area	32	53.3	20	33.3	8	13.3
Dam Parking Turnout	25	45.5	19	34.5	11	20.0
Enfield Lookout	116	34.9	165	49.7	51	15.4
Hanks Picnic	46	39.0	65	55.1	7	5.9
Goodnough Picnic Area	7	33.3	10	47.6	4	19.0
Goodnough Lookout Point	6	40.0	6	40.0	3	20.0
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	2	100.0	0	0.0	0	0.0
Gate 8 Boat Launch	21	19.3	78	71.6	10	9.2
Gate 31 Roadway	2	40.0	2	40.0	1	20.0
Gate 31 Mooring	3	12.5	20	83.3	1	4.2
Gate 40	2	9.5	17	81.0	2	9.5
Gate 42	1	100.0	0	0.0	0	0.0
Gate 43 Boat Launch	0	0.0	5	83.3	1	16.7
Gate 44	0	0.0	3	100.0	0	0.0
Other	2	13.3	13	86.7	0	0.0
Swift River	13	46.4	12	42.9	3	10.7
Total (1565)	536	34.2	801	51.2	228	14.6

Missing:
N=278

Problem Sites: Most Quabbin Park sites, Swift River

Table 26
Knowledge of Policy on Power
Boating on Main Reservoir

Site	Incorrect		Correct		Unsure	Percent
Tower	29	6.1	389	82.4	54	11.4
Visitors Center	33	12.4	196	73.4	38	14.2
Dam Picnic Area	4	6.7	52	86.7	4	6.7
Dam Parking Turnout	5	9.1	38	69.1	12	21.8
Enfield Lookout	29	8.7	284	85.5	19	5.7
Hanks Picnic	2	1.7	107	90.7	9	7.6
Goodnough Picnic Area	2	9.5	18	85.7	1	4.8
Goodnough Lookout Point	2	13.3	11	73.3	2	13.3
Goodnough Tailhead	0	0.0	0	0.0	1	100.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	3	2.7	103	93.6	4	3.6
Gate 31 Roadway	1	20.0	3	60.0	1	20.0
Gate 31 Mooring	0	0.0	23	95.8	1	4.2
Gate 40	1	4.8	18	85.7	2	9.5
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	1	16.7	5	83.3	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	14	93.3	1	6.7
Swift River	1	3.6	26	92.9	1	3.6
TOTAL (1562)	113	7.2	1299	83.2	150	9.6

Missing:
N=281

No problem sites

Table 27
Knowledge of Policy on
Sailing on Reservoir

Site	Incorrect Percent		Correct Percent		Unsure	Percent
Tower	51	10.8	343	72.7	78	16.5
Visitors Center	20	7.4	195	72.5	54	20.1
Dam Picnic Area	4	6.7	47	78.3	9	15.0
Dam Parking Turnout	6	10.9	37	67.3	12	21.8
Enfield Lookout	26	7.8	276	83.1	30	9.0
Hanks Picnic	7	5.9	96	81.4	15	12.7
Goodnough Picnic Area	5	23.8	14	66.7	2	9.5
Goodnough Lookout Point	1	6.7	10	66.7	4	26.7
Goodnough Tailhead	0	0.0	0	0.0	1	100.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	7	6.4	97	88.2	6	5.5
Gate 31 Roadway	0	0.0	4	80.0	1	20.0
Gate 31 Mooring	2	8.3	21	87.5	1	4.2
Gate 40	0	0.0	18	85.7	3	14.3
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	14	93.3	1	6.7
Swift River	3	10.7	22	78.6	3	10.7
Total (1564)	132	8.4	1212	77.5	220	14.1

Missing:
N=279

Problem Site: Goodnough Picnic Area

Table 28
Knowledge of Policy on Swimming

Site	Incorrect		Correct		Unsure	Percent
		Percent		Percent		
Tower	14	3.0	422	89.4	36	7.6
Visitors Center	6	2.2	244	91.0	18	6.7
Dam Picnic Area	2	3.3	56	93.3	2	3.3
Dam Parking Turnout	2	3.6	47	85.5	6	10.9
Enfield Lookout	4	1.2	321	97.0	6	1.8
Hanks Picnic	1	0.8	114	96.6	3	2.5
Goodnough Picnic Area	1	4.8	18	85.7	2	9.5
Goodnough Lookout Point	0	0.0	14	93.3	1	6.7
Goodnough Tailhead	0	0.0	1	100.0	0	0.0
Pottapaug Pond	0	0.0	6	100.0	0	0.0
Dana Center	0	0.0	2	100.0	0	0.0
Gate 8 Boat Launch	0	0.0	106	96.4	4	3.6
Gate 31 Roadway	1	20.0	4	80.0	0	0.0
Gate 31 Mooring	1	4.2	22	91.7	1	4.2
Gate 40	0	0.0	21	100.0	0	0.0
Gate 42	0	0.0	1	100.0	0	0.0
Gate 43 Boat Launch	0	0.0	6	100.0	0	0.0
Gate 44	0	0.0	3	100.0	0	0.0
Other	0	0.0	15	100.0	0	0.0
Swift River	1	3.6	24	85.7	3	10.7
Total (1562)	33	2.1	1447	92.6	82	5.2

Missing:
N=281

No problem sites

Table 29. Visitors Perceptions of the Needs of Additional Facilities

A majority of visitors felt that additional nature programs and rest room facilities were needed at Quabbin while more than one-third expressed the desire for increases in trails and expanding the visitors' center. The least support was expressed for parking lots and tent camping sites although by no less than approximately one in four. In all cases except tent camping, the number of respondents who were undecided was sizable. In all likelihood, considerable support would be found in this group if expansion efforts were effectively carried out in a way which is sensitive to the environment.

Table 29
Visitors Perceptions of the
Need for Additional Facilities

Facility Needed	Yes		No		Unsure		Total
	N	Percent	N	Percent	N	Percent	
Hiking Trails	568	36.6	474	30.5	511	32.9	1553
Bicycling Trails	539	34.8	482	31.1	530	34.2	1551
Nature Programs	1044	67.4	131	8.5	375	24.2	1550
Tent Camping	354	22.8	1077	69.4	121	7.8	1552
Parking Lots	404	26.1	881	57.0	260	16.8	1545
Rest Rooms	815	52.8	466	30.2	263	17.0	1544
Visitors Center	526	34.1	417	27.1	598	38.8	1541

Table 30. Summary of Open-ended Comments Regarding Quabbin's Recreation Opportunities or the Way it is Managed

The fact that most people had no comment to offer suggests that there is an absence of dissatisfaction by the large majority. Of those who did provide comments, an impressive number were favorable.

**Table 30
Summary of Open-ended Comments
Regarding Quabbin's Recreation
Opportunities or the Way it is Managed**

Comment	Number	Percent
Like It As Is	233	20.10
Well Managed	219	18.90
Keep Natural	54	4.66
Increase Security	30	2.59
Know Very Little	28	2.42
Allow Canoeing	22	1.90
Allow Swimming	20	1.73
Allow Sailing	16	1.38
Stock More Fish	11	0.95
Fix Fish Gate Roads	10	0.86
More & Better Ramps	7	0.60
No Non Fishing Boats	6	0.52
Expand Fishing Areas	6	0.52
Add Water Fountain	6	0.52
Viscntr More Visible	6	0.52
Add Playground	4	0.35
Ban Swimming	3	0.26
Add Hiking Trail	3	0.26
Ban Canoeing	2	0.17
Ban Sailing	2	0.17
Add Fish Picnic Area	2	0.17
More Telescope Time	1	0.09
Boat Anchors	1	0.09
Other	467	40.29
Total	1159	100.00

Table 31. Respondents' Knowledge of Quabbin as a Water Supply

The question of peoples' knowledge of Quabbin as a water supply reservoir was almost unanimous; 98.5 percent responded correctly.

Table 31
Respondents' Knowledge of
Quabbin as a Water Supply

	Number	Percent
Yes	1676	98.5
No	22	1.3
Unsure	4	0.2
Total	1702	100.0

Missing:
N=141

Table 32. Amount Willing To Pay For an Entry Fee (Per Automobile)

Close to three-quarters of the respondents indicated a willingness to pay between \$1 and \$3 per automobile upon each entry to the reservation.

Table 32
Amount Willing to Pay For an Entry Fee
(Per Automobile)

	N	Percent
>\$1	333	19.87
\$1 to \$3	1180	70.41
<\$3	163	9.73
Total	1676	100.00

Table 33. The Amount Willing to Pay For an Entry Fee by Type of Participation in Outdoor Recreation Activities

Most Visitors stated that they would be willing to pay an entry fee, on a per-car basis, to visit Quabbin. The following data make it clear that there is quite a bit of variation among respondents, however, depending on their particular activity grouping. Groups willing to pay the largest amounts included those who bicycle, camp, canoe, golf, hike, jog, cross-country ski, play soccer and swim.

Table 33
The Amount Willing to Pay For an Entry Fee by Type
of Participation in Outdoor Recreation Activities

Activity	Level	>\$1		\$1 to \$3		<\$3		X2	Signif
		N	Percent	N	Percent	N	Percent		
Bicycling	no	951	59.0	400	24.8	261	16.2	9.461	0.009
	yes	112	48.5	69	29.9	50	21.6		
Boating	no	1010	58.0	436	25.0	296	17.0	2.953	0.228
	yes	53	52.5	33	32.7	15	14.9		
Camping	no	947	58.3	414	25.5	264	16.2	4.076	0.130
	yes	116	53.2	55	25.2	47	21.6		
Canoeing	no	1031	58.2	446	25.2	295	16.6	4.837	0.089
	yes	32	45.1	23	32.4	16	22.5		
Fishing	no	1005	58.0	432	24.9	295	17.0	3.913	0.141
	yes	58	52.3	37	33.3	16	14.4		
Golf	no	1032	58.3	445	25.1	294	16.6	6.623	0.037
	yes	31	43.1	24	33.3	17	23.6		
Hiking	no	767	59.5	328	25.4	195	15.1	10.24	0.006
	yes	296	53.5	141	25.5	116	21.0		
Hunting	no	980	57.8	425	25.1	291	17.2	2.315	0.314
	yes	83	56.5	44	29.9	20	13.6		
Jogging	no	1008	58.1	441	25.4	286	16.5	3.593	0.166
	yes	55	50.9	28	25.9	25	23.1		
Motorcycling	no	1036	57.4	461	25.5	309	17.1	4.692	0.096
	yes	27	73.0	8	21.6	2	5.4		
Photography	no	990	58.0	433	25.4	285	16.7	0.904	0.636
	yes	73	54.1	36	26.7	26	19.3		
Picnicking	no	988	57.1	444	25.7	297	17.2	3.497	0.174
	yes	75	65.8	25	21.9	14	12.3		
Sailing	no	1044	57.8	455	25.2	307	17.0	3.363	0.186
	yes	19	51.4	14	37.8	4	10.8		
Skiing (x-c)	no	996	58.9	416	24.6	279	16.5	12.80	0.002
	yes	67	44.1	53	34.9	32	21.1		
Skiing	no	1018	58.8	430	24.8	283	16.3	15.11	0.001
	yes	45	40.2	39	34.8	28	25.0		
Soccer	no	1056	57.9	464	25.4	305	16.7	4.069	0.131
	yes	7	38.9	5	27.8	6	33.3		
Swimming	no	891	59.1	374	24.8	243	16.1	0.411	0.814
	yes	172	51.3	95	28.4	68	20.3		
Walking	no	786	55.6	370	26.2	257	18.2	11.91	0.003
	yes	277	64.4	99	23.0	54	12.6		
Waterskiing	no	1049	57.7	462	25.4	307	16.9	0.089	0.957
	yes	14	56.0	7	28.0	4	16.0		

Table 34. Amounts Willing to Pay to Recreate at Quabbin Among Those who Boat Fish and Those who Observe Eagles

Approximately half the visitors within each group indicated a willingness to pay up to \$1 as an entry fee. While those who fish by boat were willing to pay \$3.00, or more, in greater proportion than those who observe eagles, the difference was not statistically significant.

Table 34
Amounts Willing to Pay to Recreate at Quabbin Among Those who Boat Fish and Those who Observe Eagles

Fee/Car	Fish by Boat		Observe Eagles	
	N	Percent	N	Percent
\$1.00 or Less	75	49.30	116	54.70
\$1.01 to \$2.99	46	30.30	63	29.70
\$3.00 or More	31	20.40	33	15.60
Total	152	100.00	212	100.00

X²=1.67

SIGNIF=.4338

Table 35. Effects of Fees on Future Visits.

Almost 70 percent said that an increase in entry fees would not alter their number of future visits to Quabbin. The remaining 30 percent indicated that the implementation of a fee structure would have a negative impact on future visits.

Table 35
Effects of Fees on Future Visits

Future Visits Would Be	N	Percent
Same	1163	68.90
Less	414	24.50
Would Not Come	110	6.60
Total	1687	100.00

Table 36. Effects of Increased Fees on Future Visits of Those who Boat Fish and Those who Observe Eagles

As is apparent in this table, those who fish by boat would be less affected by an entry fee than those who observe eagles. The 27 percent of those who fish, and 35 percent of the eagle watchers who would be negatively affected by the imposition of any entry fee, represents a sizable number of visitors.

**Table 36
Effects of Increased Fees on Future Visits of Those
who Boat Fish and Those who Observe Eagles**

Future Visits	Fish by Boat		Observe Eagles	
	N	Percent	N	Percent
Same	102	72.9	132	64.2
Less	29	20.7	61	29.5
Would not Come	9	6.4	13	6.3
Total	140	100	207	100

X²=3.49

SIGNIF=.1748

Table 37. Those Who Boat Fish and Those Who Observe Eagles by Sex

The male/female breakdown of visitors was not unexpected. More than three-quarters (80 percent) of those who fish by boat were male and twenty percent were female. The eagle observers were a little more evenly divided.

**Table 37
Those Who Boat Fish and Those
Who Observe Eagles by Sex**

Sex	Fish by Boat		Observe Eagles	
	N	Percent	N	Percent
Male	118	80.30	128	61.80
Female	29	19.70	79	38.20
Total	147	100.00	207	100.00

X²=12.92

SIGNIF=.0003

Table 38. Quabbin Visitors by Region of Residence of Those who Boat Fish and Those who Observe Eagles

Almost all of those who fish come from either Massachusetts or New England. Most of those observing eagles also reside in Massachusetts and New England.

**Table 38
Quabbin Visitors by Region of Residence of
Those who Boat Fish and Those who Observe Eagles**

Region	Fish by Boat		Observe Eagles	
	N	Percent	N	Percent
Mass	137	95.10	177	86.30
New England	4	2.80	23	11.20
NY	0	0.00	1	0.50
PA/NJ/DE	1	0.70	3	1.50
Other U.S.	2	1.40	1	0.50
Total	144	100.00	205	100.00

X²=10.45

SIGNIF=.0334

**Table 39
Amount willing to pay for a family pass to Quabbin Reservoir**

Most of those surveyed stated that they would be willing to pay for some form of family pass to enter Quabbin Reservation. The most popular fee for this type of pass was in the range from \$10.00 to \$19.99 (more than one-third of the responses). The next popular fee range was, \$20.00 to \$49.99, with more than one-quarter willing to pay that amount.

**Table 39
Amounts willing to pay for a family pass**

	N	Percent
Less than \$.99	288	19.43
\$1.00 to \$2.99	24	1.62
\$3.00 to \$5.99	164	11.07
\$6.00 to \$9.99	8	0.54
\$10.00 to \$19.99	535	36.10
\$20.00 to 49.99	416	28.07
\$50.00 or More	47	3.17
Total	1482	100.00

Table 40
Duration of Visitors' Stay

Among these respondents, three-quarters spent less than 3 hours at the reservation. Nearly one-half of the total number of visitors surveyed were at Quabbin for between 1-1/2 and 3 hours.

Table 40
Duration of Visitors' Stay

	N	Percent
1 Hour or Less	514	28.20
1.5 to 3 Hours	861	47.23
3.5 to 5 Hours	270	14.81
5.5 to 7.5 Hours	112	6.14
8 or More	66	3.62
Total	1823	100.00

Summary of key Points

- Visitors' knowledge of rules, regulations and policies is weak in some areas.
- There was considerable resistance to the idea of charging a fee to enter Quabbin. The fact that 30 percent would come less often or not at all if even a small fee were levied is very informative. If fees were to be considered, it is well to know that some visitors would express dissatisfaction over that change in policy.
- There is a need for more public information related to policies and the availability of certain opportunities at Quabbin. Specifically, a brochure should be developed and made available to appropriate groups as well as being placed in the Visitors' Center.
- Expanding certain programs and facilities should be examined in the context of management objectives, safety and the public's desire for them.
- There is considerable satisfaction with the way in which Quabbin Reservation is managed and with the opportunities it offers. There was clearly little criticism of its management practices or policies.

Concluding Comments

Management should be aware of the changes that were suggested, at times by the majority, at times by a sizable majority. Judgments must be made as to whether a 20 or 30 percent minority view is important, or not. Obviously, a view held by one in four or five is far from representing a majority; it does, however, reflect the views of large numbers of visitors and potential visitors. The fact that a minority of visitors participate in a given activity does not diminish the importance of providing opportunities for that activity.

Many perspectives were represented in this sampling of more than 1800 Quabbin visitors. Some have offered suggestions for change while others would like it to remain as is. This is, of course, a question of balance, values and funding. Collectively, these factors will shape the future of this major Massachusetts resource.